UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte THOMAS D. PETITE

Appeal No. 2005-1812
Application No. 09/925,269

ON BRIEF

Before THOMAS, DIXON, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-29, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates to wireless communications networks for providing remote monitoring of devices (specification, p. 1).

Claim 1 is representative of the invention, and is reproduced as follows:

> 1. A wireless communication network adapted for use in an automated monitoring system for monitoring and controlling a plurality of remote devices via a host computer connected to a wide area network, the wireless communication network comprising:
>
> a plurality of wireless transceivers having unique identifiers, each of the plurality of wireless transceivers configured to receive a sensor data signal from one of the plurality of remote devices and transmit an original data message using a predefined wireless communication protocol, the original data message comprising the corresponding unique identifier and sensor data signal, and further configured to receive the original data message transmitted by one of the other wireless transceivers and transmit a repeated data message using the predefined communication protocol, the repeated data message including the sensor data signal and the corresponding unique identifier; and
>
> a site controller in communication with at least one of the plurality of wireless transceivers, the site controller configured to receive the original data messages and the repeated data messages, identify the remote device associated with the corresponding sensor data signal, and provide information related to the sensor data signal to the wide area network for delivery to the host computer.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Canada et al. (Canada)	5,907,491	May 25, 1999
Chen	6,060,994	May 09, 2000
Shaughnessy et al. (Shaughnessy)	6,141,347	Oct. 31, 2000 (filed Mar. 31, 1999)
Casais	6,288,641	Sep. 11, 2001 (filed Sep. 15, 1999

Claims 1-4 and 7-16 and 19-23 and 26, 27 and 29[1] stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Canada in view of Shaughnessy.

Claims 5, 6, 17, 18, 24 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Canada in view of Shaughnessy and Casais.

Claim 28 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Canada in view of Shaughnessy and Chen.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the answer (mailed March 26, 2004) for the examiner's complete reasoning in support of the rejections, and to the brief (filed January 5, 2004) and reply brief (filed May 17, 2004) for the appellant's arguments thereagainst.

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[1]It is unclear as to why claim 29 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Canada in view of Shaughnessy, as claim 29 depends from claim 28, which as been rejected under 35 U.S.C. § 103(a) as being unpatentable over Canada in view of Shaughnessy and Chen.

Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered. See 37 CFR § 41.37(c)(1)(vii)(eff. Sept. 13, 2004).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejections advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

Upon consideration of the record before us, we make the determinations which follow. We note at the outset that appellant has grouped the claims into five groups which have been separately argued. However, we observe that the groupings of claims are not consistent with the rejections made by the examiner; i.e., claims 5, 6, 17, 18 and 28 are grouped with claims rejected over different references. Accordingly, we will follow the groupings set forth by appellant to the extent that they are consistent with the rejections set forth by the examiner.

We begin with the rejection of claims 1-4, 7-16, 19-23, 26, 27 and 29 as being unpatentable over Canada in view of Shaughnessy. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444

(Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner's position (answer, page 4) is that Canada does not teach a wide area network or a predefined communication protocol. To overcome this deficiency of Canada, the examiner turns to Shaughnessy for a teaching of a wide area network and a communications protocol. The examiner asserts (answer, pages 4 and 5) that the modification would have been obvious because it would have allowed a skilled artisan to distribute processing which would increase scalability.

Appellant's position (brief, page 6) is that the examiner has failed to establish proper motivation for combining the teachings of the references, and that no combination of the references fails to teach or suggest each and every limitation of the claims. It is argued (brief, page 7) that Shaughnessy is non-analogous art, and that Shaughnessy relates to global mobile wireless communications systems and not to localized wireless

monitoring systems. Appellant continues (brief, page 8) that in Shaughnessy, the system manages the movement of cell phone users as they move between sites supported by a cell phone tower. Appellant argues that one skilled in the art of local polling-type monitoring systems for manufacturing plants would not look for cost reduction solutions related to maintenance and installation in the complex filed of multicast addressing schemes in mobile telecommunications systems. Appellant further asserts (brief, page 10) that the examiner's motivation or suggestion is based upon impermissible hindsight solely on appellant's disclosure.

It is additionally argued (brief, page 12) that Canada merely monitors physical characteristics and does not teach or suggest the limitation of controlling the remote devices, and that Shaughnessy does not control the mobile phones. It is further asserted (brief, page 13) that claim 1 recites:

> a plurality of transceivers having unique identifiers ... **further configured to receive the original data message transmitted by one of the other wireless transceivers and transmit a repeated data message** using the predefined communication protocol. (emphasis original).

It is argued that in Canada, the machine monitors 4 transmit an original data message but are not capable of transmitting a repeated data message. It is argued (id.), that in Canada, machine monitors 4 can relay messages to command station 6 or to

repeaters 8a-8d, but not to other machine monitors. Appellant adds that because repeaters 8a-8d are not associated with an individual machine monitor 4, the repeaters do not transmit a unique identifier, and that:

> Furthermore, in the '491 patent, the transceivers associated with machine monitors 4a-4l merely transmit and receive to repeaters 8a-8d -- they do not transmit to other transceivers associated with the machine monitors

Appellant additionally asserts (brief, page 15) that:

> Appellant submits that the'491 patent does not teach, disclose, or suggest the limitation/feature/element of the wireless transceivers associated with the remote devices being configured to repeat data messages from wireless transceivers associated with other remote devices.

It is argued that:

> Despite the fact that the '491 patent does teach a standalone repeater, Appellant respectfully submits that the '491 patent does not disclose, teach, or suggest the relevant limitation/feature/element at issue -- the wireless transceivers associated with the remote device being configured to repeat data messages from wireless transceivers associated with other remote devices.

From our review of the record, we find, contrary to the opinion of the examiner (answer, page 4) that Canada discloses a predefined communications protocol. As disclosed by Canada (col. 2, lines 40 and 41) "[t]he wireless status signals can be transmitted in accordance with a variety of communication protocols." Canada additionally discloses (col. 3, lines 36-38)

that "[t]he method includes the steps of programming a plurality of machine monitors in accordance with a communication protocol." From these disclosures of Canada, we find that Canada discloses using a predefined communications protocol for the wireless system.

Nor do we agree with the examiner (answer, page 24) that "Canada suggests a wireless connection to a WAN such as the internet." Although Canada discloses (col. 8, lines 6-9) that command station 6 can be connected to a PC network, we find no disclosure in Canada that the network can be a WAN or the Internet. In addition, from the disclosure (col. 1,lines 55-63) of monitoring several dozen to several hundred machines in a single plant, we agree with appellant (brief, page 12) that Canada (id.) is directed to monitoring physical characteristics of machines within a manufacturing plant. However, we do not agree with appellant that there is no motivation to modify Canada in view of the teachings of Shaughnessy.

The Shaughnessy reference is directed to a global communications system and not to a localized wireless monitoring system, as noted by appellant (brief, page 7). However, from the disclosure of Shaughnessy (figure 2) of having plural LANs 231-234 connected to a server 235 through a WAN 230 (see col. 3, lines 34-41), we find that an artisan would have been taught that

the system of Canada could be connected to one or more additional manufacturing plants or to a server over a WAN. Nor do we agree with appellant (brief, page 12) that Canada merely monitors physical characteristics and does not teach or suggest the limitation of controlling the devices. From our review of Canada, we find that Canada discloses (col. 15, lines 16-24) that:

> The transceiver 430 also provides for receiving and decoding messages from the command station 6 which are transmitted to the machine monitor 4 in the form of RF signals. Such messages include: (1) timing messages which synchronize the machine monitor timer 424 to the command station computer's clock; (2) scheduling messages which tell the machine monitor 4 when, what, and how to measure, analyze, and transmit the sensor data and when to receive other messages from the command station 6

From the disclosure that the messages from the command station 6 to the machine monitor 4 include telling the machine monitor when, what, and how to measure, analyze, and transmit the sensor data and when to receive other messages from the command station 6, we find that Canada teaches controlling the machine monitors 4.

Appellant additionally asserts (brief, page 13) that the repeaters 8a-8d of Canada do not transmit a unique identifier, and that the transceivers associated with machine monitors 4a-4l merely transmit and receive to repeaters 8a-8d, and do not transmit to other transceivers associated with the machine

monitors. With regard to the first part of the assertion, we find that in Canada (col. 11, lines 7-24), during system setup or when adding new devices, a configuration command is issued by command section 6 every 15 seconds, and the poll results are transmitted to ICU 9. When the signal strength falls below a certain level, the user knows that a repeater (or monitor) should be installed or configured. The user then keys in the necessary information and causes the ICU 9 to transmit the configuration information to the device being configured. The ICU commands the device to transmit a signal strength scan using a predefined code. The scan code for each strength level includes unique identifying information. Canada additionally discloses (col. 12, lines 1-5) that:

> When a repeater installation is complete, the ICU 9 responds to the next 15 second poll by transmitting its status and a command to the designated repeater 8, instructing the repeater 8 to inform the command station 6 as to which repeater 8 the ICU 9 is currently communicating through.

Moreover, Canada discloses (col. 8, lines 49-51) that when the status poll response goes back to the command station 6, each repeater adds its own response and the response of all monitors assigned to it. From the disclosure of Canada that the repeater transmits a signal strength scan using a unique scan code; that the repeater identifies itself to the command station 6 after

repeater installation is complete, and that the repeater adds it own response to the responses of the monitors, we find that the repeaters have a unique identifier. Turning to the second part of appellant's assertion, to the extent that appellant considers the transceivers of Canada to be the transceivers on the machine monitors 4 and not the repeaters, we find that Canada discloses (col. 16, lines 50-54) that:

> To enable the command station 6 to verify which machine monitor 4 is transmitting a data message, each machine monitor 4 transmits a unique identification code prior to the sensor data message. The identification code combined with the sensor data message comprise a data packet.

However, we agree with appellant that the machine monitors transmit to repeaters or directly to command station 6 (machine monitors 4j-4l), but do not transmit to other machine monitors. Because the machine monitors 4 do not transmit to other machine monitors 4, but rather only transmit to repeaters or directly to command station 6, the limitations of claim 1 are not met by the teachings of Canada and Shaughnessy. Considering the repeaters to be the transceivers, claim 1 is still not met because claim 1 requires that the transceiver receives the sensor data and transmits a original data message containing the sensor data signal and the unique identifier. The claim also requires that the transceiver receives the original data message from one of

the other transceivers. In Canada, the repeaters 8a-8d receive the original data message from the transceiver of a machine monitor 4 and transmits the information to the command station 6 or to another repeater if needed. However, because the received original message includes the unique code from machine monitor 4 as well as the sensor data signal, we find no clear disclosure that the repeater adds a unique identifier to the received sensor data signal and unique code of the machine monitor 4 before forwarding the information on to the command station 6 or to another repeater, if needed.

From the disclosure of Canada (col. 4, lines 65-67) that repeater 8 receives the signals from the machine monitors 4 and retransmits the signals to the command station, and the disclosure of Canada (col. 18, lines 30-32) that the repeater is transparent to the other components, we find that the repeater does not add a unique identifier to the received sensor signal and unique identifier of the machine monitor 4. As discussed, supra, although Canada does disclose that when the status poll response goes back to the command station 6, the repeater adds its own response to the responses of the machine monitor; that the repeater transmits a signal strength scan using a unique scan code; that the repeater identifies itself to the command station

6 after repeater installation is complete the reference does not explain what the phrase "its own response" is referring to. It could merely be an indication that the information was transferred by a repeater without an indication as to which repeater the information was sent through. Thus, although the repeaters have unique identifiers, which are communicated to the command station after configuration, we would have to resort to speculation to arrive at the conclusion that the unique identifier is added to the received sensor data signal and unique identification of the machine monitor by the repeater. Accordingly, we find that the examiner has failed to establish a prima facie case of obviousness of claim 1. The rejection of claim 1 under 35 U.S.C. § 103(a) is therefore reversed.

As the other independent claims 8, 13, 20 and 27 contain similar language, the rejection of claims 2-4, 7-16, 19-23, 26, 27 and 29 under 35 U.S.C. § 103(a) is also reversed.

We turn next to the rejection of claims 5, 6, 17, 18, 24 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Canada in view of Shaughnessy and Casais. We reverse the rejection of claims 5, 6, 17, 18, 24 and 25 because Casais does not make up for the deficiencies of the basic combination of Canada and Shaughnessy.

We turn next to the rejection of claim 28 under 35 U.S.C. § 103(a) as being unpatentable over Canada in view of Shaughnessy and Chen. We reverse the rejection of claim 28 because Chen does not make up for the deficiencies of Canada and Shaughnessy.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-29 under 35 U.S.C. § 103 is REVERSED.

REVERSED

JAMES D. THOMAS
Administrative Patent Judge)

JOSEPH L. DIXON
Administrative Patent Judge) BOARD OF PATENT APPEALS AND INTERFERENCES

STUART S. LEVY
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